

**FIRST RECORD OF FALSE KILLER WHALES (*PSEUDORCA CRASSIDENS*), IN NEW CALEDONIA, SOUTH PACIFIC.** *Memoirs of the Queensland Museum* 43(2): 588. 1999. - On September 14, 1996, at 10:07 a group of false killer whales, *Pseudorca crassidens*, was observed in the waters of the SW limit of the lagoon surrounding New Caledonia (22°33.8'S, 166°59.0'E). Observations were carried out during an annual humpback whale, *Megaptera novaeangliae*, research season. Sea conditions were very calm, visibility was hazy with over 75% cloud cover. The sea surface temperature taken at 09:00 was 22.75°C.

The animals were swimming towards the SE when first sighted and did not deviate from this path when approached in a 5m outboard boat. The group was large, comprising more than 100 individuals and consisting of many subgroups containing between 5 and 10 individuals each. The subgroups were at least 20m apart and spread over a large area of the sea surface. This type of schooling behavior is consistent with other observations of this species (Acevedo-Gutiérrez et al., 1997; Leatherwood & Reeves 1983), known for its gregarious behavior (Stacey & Baird, 1991).

The animals were approximately 5m in length, a great deal larger than the pygmy killer whale, *Feresa attenuata*, or the melonhead whale, *Peponocephala electra* (Jefferson et al., 1993). While the heads of the animals were rounded, they lacked the pronounced melon of short-finned pilot whales, *Globicephala macrorhynchus* (Jefferson et al., 1993), and had no obvious beak. Their dorsal fins were pointed but curved and around 20-30cm in height. For some individuals the ventral coloring was slightly paler than the rest of the animal, which was a dark gray. Field notes describing physical characteristics and photographs (Fig. 1) leave no doubt about the identification of the animals as false killer whales, *Pseudorca crassidens*.

Whistles emitted by the false killer whales were audible from the boat with the motors running, with the aid of a hydrophone both whistles and sonar clicks could be heard. A 22-minute recording of the false killer whale was made. For the entire period of the recording animals continued to pass the boat. At one stage 4 individuals approached and swam under the boat turning sideways as they passed, sonar clicks became very strong at that moment.

On departing in the same direction as the false killer whales, a subgroup of 5 individuals approached the boat and began surfing the bow wave. Using a crossbow and adapted bolt a biopsy was taken from a large individual. While with this subgroup, other subgroups were continuously visible, some containing smaller individuals assumed to be juveniles. These groups never approached the boat.

The continuous passage SE of the subgroup accompanying the boat was interrupted at 11:16 when they paused on the

surface. One individual made a sudden, and extremely rapid, movement out of the subgroup. Five minutes later an individual was observed carrying a large piece of yellowfin tuna, *Thunnus albacares*, in its mouth. While the dietary habits of false killer whales are not well known, they appear to feed opportunistically on a wide range of prey types and sizes, including large pelagic species such as Mahi-mahi, *Coryphaena hippurus* (Leatherwood & Reeves, 1983; Stacey & Baird, 1991).

After catching the tuna the subgroup started to distance itself from the boat. Avoidance behavior was initiated by diving for a period of about two minutes, after which the subgroup surfaced 50m in front of the boat and several breaches were observed. We accelerated to a speed of 6 knots to follow the subgroup. The remaining contact with the group consisted of them surfacing at 2-minute intervals while moving steadily towards the southeast. Boat speed varied between 3.3 and 10.8 knots. At midday it was decided to stop following the group, the final position was 22°36.3'S, 167°04.8'E. We had remained with the group for 1 hour 53 minutes, covered a distance of approximately 6.4 nautical miles and traveled at an average speed of almost 5 knots.

Reports of false killer whales from the SW Pacific are not uncommon, mass strandings of the species have been recorded from both New Zealand and Australia (Baker, 1983). In addition, this species has been caught incidentally in Taiwanese gillnets from N Australia (Harwood et al., 1984), and reported from dolphin drive fisheries in the Solomon Islands (Dawbin, 1974). In spite of a few records from inshore waters (Stacey & Baird, 1991; Acevedo-Gutiérrez et al., 1997), the false killer whale is known as a pelagic species (Wade & Gerrodette, 1993), so it is not surprising that sightings have not been more frequent in New Caledonia, where most scientific studies are confined to the inner lagoon. It is likely that this species is not uncommon in the oceanic waters surrounding the New Caledonian lagoon.

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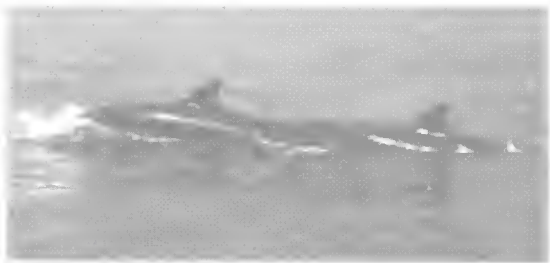


FIG. 1. False killer whale *Pseudorca crassidens*, demonstrating the characteristic rounded head lacking a beak and the tall, falcate dorsal fin.